



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,778	04/27/2001	Atsushi Ito	1945-347	3837

6449 7590 03/12/2003

ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

EXAMINER

MACCHIAROLO, PETER J

ART UNIT PAPER NUMBER

2875

DATE MAILED: 03/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Am

Office Action Summary

Application No.

09/842,778

Applicant(s)

ITO ET AL.

Examiner

Peter J Macchiarolo

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 7-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. Receipt of the continuity data is acknowledged to application number 09/247,061, now U.S. Patent 6,252,345, which claims for foreign priority to JP HEI 10-276731.

Amendment

2. Receipt is acknowledged of Preliminary Amendment-A, which deletes the claims that were prosecuted in the parent application. Claims 1-6 have accordingly been withdrawn and have not been considered.

Information Disclosure Statement

3. The information disclosure statement filed June 28, 2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. None of the listed references were received, and therefore, the information disclosure statement has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The limitation "...each of said display cells emitting light through discharge," is not clear. The Examiner is interpreting the limitation as follows:

"...each of said display cells emitting light."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haraga et al (USPN 5,126,620; henceforth "Haraga") in view of Steenblik et al (USPN 5,568,313; henceforth "Steenblik").
8. In regards to claim 7, Haraga discloses in figure 8 and column 5 lines 20-31, a display element comprising a resin material which has been formed over a front panel (2) which covers the front surface of a luminous portion (5). Haraga further teaches in figure 8 and column 1 lines 61-65, that a the resin is formed into a plurality of lenses, which condense light from a display cell to the front side of the display panel, which prevents any decrease in the contrast. Haraga further teaches in figure 10 lines 61-65, that one method of manufacturing the lenses is molding.
9. Haraga is silent to an exact method of molding the condensing lenses.
10. However, pressing a molding tool against the front surface of the resin layer and then separating the molding tool form the resin is well known in the art as "compression molding." This method of compression molding is extremely well known in the art, as evidenced by Steenblik in column 10 lines 5-11 and figure 5. It is further well known in the art that compression molding is relatively simple, and requires little manufacturing time, saving resources and money.
11. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the display element of Haraga, using compression molding to form the resin lens, since the method of compression molding is well known in the art, and further, it is well known that compression molding is relatively simple and requires little manufacturing time, saving resources and money.

12. In regards to claims 8-9, Haraga and Steenblik teach all of the recited limitations of claim 7 (above). Haraga further teaches in figure 9 the luminous portions comprise a plurality of display cells disposed in a matrix form, and each of the display cells emits light. Haraga further teaches in column 10 lines 56-61 that if the lenses are made from plastic (resin), the condensing lenses can be formed by using a pigment corresponding to the luminous layers they covers. Haraga further teaches in column 11 lines 21-24, that increasing the contrast between the states of full-emission and non-emission in each of the pixels.

13. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the display element of Haraga, since Haraga teaches this configuration increases the contrast between the states of full-emission and non-emission in each of the pixels.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jondrow (USPN 6,072,274) discloses a method for molding resins into a specific shape. Dannoux et al (USPN 5,836,798) discloses a method of making a plasma display which includes compression molding. Steenblik et al (USPN 5,461,495) discloses resin lenses and a method of forming them. Ishihara (USPN 4,667,092) discloses a resin lens. Conley (USPN 4,414,316) discloses a screen sheet which comprises resin lenses and a method of forming them. The above references disclose or motivate one skilled in the art to manufacture a resin lens by compression molding, they are not, however, relied upon in the Office Action.

Application/Control Number: 09/842,778
Art Unit: 2875

Page 6

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (703) 305-7198. The examiner can normally be reached on 7.30 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

pjm
March 6, 2003


Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800